REMARKS/ARGUMENTS

In view of the foregoing amendments and the following remarks, the applicants respectfully submit that the pending claims comply with 35 U.S.C. § 112, are not anticipated under 35 U.S.C. § 102 and are not rendered obvious under 35 U.S.C. § 103. Accordingly, it is believed that this application is in condition for allowance. **If, however, the Examiner believes that there are any unresolved issues, or believes that some or all of the claims are not in condition for allowance, the applicants respectfully request that the Examiner contact the undersigned to schedule a telephone Examiner Interview before any further actions on the merits.**

The applicants will now address each of the issues raised in the outstanding Office Action. Before doing so, however, the undersigned would like to thank Examiner Ly for courtesies extended during the telephone interview, summarized below.

Telephone Interview Summary

This statement of the substance of the Interview, together with the remarks that follow, summarizes the issues discussed during a telephone interview. (See MPEP § 713.04.).

Date of Interview: October 16, 2007
Type of Interview: Telephone
Name of Participants:
Examiner: Cheyne D. Ly
For applicants: John C. Pokotylo

A. Exhibit(s) Shown: None

B. Claims discussed: 46 (and 49 and 51) and 62 (and 63)

C. References Discussed: U.S. Patent No. 5,987,460 ("the Niwa patent").

D. Proposed Amendments Discussed: A proposed amendment to address the Examiner's rejection of claim 62 under 35 U.S.C. § 112, second paragraph was discussed.

E. Discussion of General Thrust of the Principal Arguments

- The rejection of claims 62 and 63 under 35 U.S.C. § 112, first paragraph was discussed.
- The rejection of claim 62 under 35 U.S.C. § 112, second paragraph was discussed.
- The rejection of claim 46 (and 49 and 51) under 35 U.S.C. § 102(a) as being anticipated by the Niwa patent was discussed.

F. Other Pertinent Matters Discussed: None

G. General Results/Outcome of Interview

- The Examiner understood the applicants' position regarding support for claims 62 and 63 and requested a written response detailing support in the specification for these claims.

- The Examiner agreed that the proposed amendment to claim 62 would help clarify it.
- The Examiner confirmed the applicants' understanding of the Examiner's position, and confirmed that his understanding of the Niwa patent was in accord with that of the applicants. The Examiner seemed to appreciate the applicants' position, but indicated that he would need to consider it further, upon review of applicants' response.

Rejections under 35 U.S.C. § 112

Claim 62 stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicants regard as the invention. The applicants respectfully request that the Examiner reconsider and withdraw this ground of rejection in view of the following.

The Examiner contends that "the acts" in claim 62 lacks proper antecedent basis. This claim has been amended and complies with 35 U.S.C. § 112, second paragraph. During the telephone interview, the Examiner indicated that this type of amendment would help clarify the claim. Therefore, the applicants respectfully request that the Examiner withdraw this ground of rejection. Note that since this amendment raises no new issues, and merely corrects a minor informality raised by the Examiner, it should be entered.

Independent claim 46 has been amended to recite "acts of" in the preamble to provide antecedent basis for

claims 47 and 48 which also recited "the acts...". Since this amendment raises no new issues, and merely corrects a minor informality in claims 47 and 48, similar to one raised by the Examiner with respect to claim 62, it should be entered.

Claims 62 and 63 stand under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The applicants respectfully request that the Examiner reconsider and withdraw this rejection in view of the following.

The Examiner concluded that these claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention, and further concluded that these claims added new matter. Specifically, the Examiner contends that the recitation "the [acts of the] method are performed automatically, without the need for user intervention" has not been found in the instant specification. (See Paper No. 20070614, page 3.)

As discussed during the telephone interview, although the applicants agree that the proper test for determining compliance with the written description requirement is whether the specification conveys with reasonable clarity to those skilled in the art that, as of the filing date sought, applicants were in possession of the claimed invention, the applicants respectfully note that, "[t]he subject matter of the claim need not be described literally (i.e., using the same terms or *in*

haec verba) in order for the disclosure to satisfy the description requirement." (MPEP 2163.02)

As discussed during the telephone interview, the acts of the method of claim 46 are supported, for example, inherently by Figure 10, which is an example 930' of the duplicate removal management process 930 of Figure 9.

Referring to Figure 9, the duplicate removal management process 930 is part of an example 734' of the query processing process 734 of Figure 7. The query processing process 734 of Figure 7 is part of a search facility server 730. Section 4.3.2 of the specification describes exemplary machines 1300 for performing such processes. In this regard, the specification describes "processor(s) 1310 [that] may execute machine-executable instructions ... to effect one or more aspects of the present invention." (Page 31, lines 25-31) The specification further describes:

> Some aspects of the present invention may be effected in the general context of computer-executable instructions, such as program modules, being executed by a personal computer.
>
> .
> .
> .
>
> Program modules may include routines, programs, objects, components, data structures, etc. that perform a task(s) or implement particular abstract data types.

(Page 32, lines 5-13) As discussed during the telephone interview, with regard to the fact that the acts of the

method can be performed automatically, ***without user intervention***, the specification states:

> A user may enter commands and information into the personal computer through input devices 1332, such as a keyboard and pointing device (e.g., a mouse) for example. Other input devices such as a microphone, a joystick, a game pad, a satellite dish, a scanner, or the like, may also (or alternatively) be included. These and other input devices are often connected to the processing unit(s) 1310 through a serial port interface 1330 coupled to the system bus 1340. Input devices may be connected by other interfaces 1330, such as a parallel port, a game port or a universal serial bus (USB). ***However, in the context of a search facility 730, no input devices, other than those needed to accept queries, and possibly those for system administration and maintenance, are needed***. [Emphasis added.]

(Page 33, line 30 through page 34, line 11)

The applicants respectfully submit that at least the foregoing portions of the application demonstrate compliance with the written description requirement with respect to claims 62 and 63 because these sections, either taken alone or in the context of the rest of the application, reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Therefore, the applicants respectfully request that the Examiner withdraw this ground of rejection.

As discussed during the telephone interview, the Examiner quoted a portion of the description of Figure 10, which merely notes that the method 930' of Figure 10 ***may be repeated*** to process a next group of results if requested by a user. This statement would not lead one skilled in the art to believe that the method 930' of Figure 10 is not an automated process, nor would it lead one skilled in the art to be believe that something that ***may*** be done, ***must*** be done, precluding other implementations. In any event, the applicants have demonstrated that the application reasonably conveys to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Rejections under 35 U.S.C. § 102

Claims 46, 49, 51, 54, 55, 57, 58, 60, 61, 64, 65, 68 and 69 stand rejected under 35 U.S.C. § 102(a) as being anticipated by U.S. Patent No. 5,987,460 ("the Niwa patent"). The applicants respectfully request that the Examiner reconsider and withdraw this rejection in view of the following.

As discussed during the telephone interview, independent claims 46, 49 and 51 are not anticipated by the Niwa patent because the Niwa patent does not teach an act of (or means for, or a final results generator for) generating a set of final search results from one or more received search results using segments of the search results, wherein each of the segments includes at least one of one or more keywords (that was or were used to generate the received search results). The Niwa patent

concerns "a document retrieval-assisting method having a user interface to attain an interactive guidance function for document retrieval." (Column 1, lines 8-10) Specifically, the Niwa patent operates to display "topic words characteristically appearing in a document group in a graph form or a list form." (Column 2, lines 5 and 6) Specifically, the Niwa patent states:

> In order to display topic groups contained in a retrieved document group on real time, therefore, word groups characteristically appearing in a document group are defined as nodes; when an intense co-occurrence relation is observed between a pair of topic words, namely when the number of documents containing both of the words is very large, the word pair is linked to compose a graph which is displayed, and for graphic representation of the topic words, the document frequency of the topic words is represented on the longitudinal axis so as to identify general words and words with high specificity at glance. As to an example of the display of topic words in a list form, topic words are firstly divided in frequency classes, and words at high document frequencies middle frequencies and low frequencies should be aligned in the separate list boxes.

(Column 2, lines 15-30) Figures 8 and 18 illustrate windows for displaying "topic words" as a graph. Figure 20 illustrates a window for displaying "topic words" in high-frequency, middle-frequency and low-frequency lists.

A user can interact with any of the displayed "topic words" by adding it to an "area for positive keywords" 2222 or to an "area for negative keywords" 2223. The

search can then be refined using any added keywords. For example, the Niwa patent states:

> FIG. 8 is an example of topic word display regarding "electronic publishing", and herein, a user is virtually interested in one of displayed words, for example "desk top publishing". In this case, ***pointing the position of the word on display by means of mouse 12 and then pointing the move button 22222 for positive keywords, "desk top publishing" is stored in the area for storing positive keywords*** 5112, which is then displayed on the area of positive keywords 2122 of the user-interface window for information retrieval 21 and the area for positive keywords 2222 of the window for displaying topic words 22. Subsequently, ***pushing the button for search 216 of the user-interface window for displaying topic words 21 or search button 2211 of the window for displaying topic words 22, search is run while adding "desk top publishing" to the positive keywords, to narrow the search***. [Emphasis added.]

(Column 16, lines 22-37)

During the telephone interview, the applicants confirmed that the Examiner is interpreting the claimed "search results" to read on the "documents" retrieved (See, e.g., 214 of Figures 5 and 19.) responsive to the search, and the claimed "segments of search results" to read on "topic words" extracted from the search result documents. (See especially Paper No. 20070614, page 5 where the Examiner suggests that comparing segments of search results reads on comparing frequency ratios of topic words.)

However, in the Niwa patent, ***each of the "topic words" extracted from the search result documents does <u>not</u> include at least one of the keyword(s) (included in the query that was used to generate the search results)***. As an example, the "topic word" "Nifty Serve" is not found in the search query "electronic publishing". During the telephone interview, the Examiner did not rebut this position, but indicated that he would need to reconsider his position in light of applicants' argument. In any event, the applicants respectfully submit that independent claims 46, 49 and 51 are not anticipated by the Niwa patent for at least the foregoing reason. Since claims 54, 55, 64 and 65 depend from claim 46, since claims 57 and 58 depend from claim 49, and since claims 60, 61, 68 and 69 depend from claim 51, these claims are similarly not anticipated by the Niwa patent.

Dependent claims 64 and 68 further recite that the segments are windows defined by a predetermined number of characters. Dependent claims 65 and 69 further recite that the segments are windows defined by a predetermined number of words. The Examiner contends that the Niwa patent discloses that "segments are windows defined by a predetermined number of words," (Paper No. 20070614, page 5) citing column 12, lines 28-67 of the Niwa patent. The rejection of claims 64, 65, 68 and 69 is further improper as discussed below.

First, a predetermined number of words is not the same as a predetermined number of characters. Thus, claims 64 and 68 are not anticipated by the Niwa patent for at least this additional reason.

Second, if the Examiner is now characterizing the claimed "segments" as windows in the Niwa patent, the

windows are not used to generate a set of final search results from received search results using "windows" (segments) of the search results, wherein each of the "windows" (segments) includes at least one of the one or more keywords (that was or were used to generate the received search results). Thus, claims 64, 65, 68 and 69 are not anticipated by the Niwa patent for at least this additional reason.

Finally, the column 12, lines 38-67 of the Niwa patent cited by the Examiner does not mention "windows", but rather, concerns a graph mapping routine, including routines for calculating x and y coordinates, for converting these coordinates into display coordinates, for resolving node overlap and for mapping links. Thus, claims 64, 65, 68 and 69 are not anticipated by the Niwa patent for at least this additional reason.

Rejections under 35 U.S.C. § 103

Claims 47, 48, 50 and 52 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the Niwa patent as applied to claims 46, 49 and 51 above, in view of U.S. Patent No. 5,634,051 ("the Thomson patent"). The applicants respectfully request that the Examiner reconsider and withdraw this rejection in view of the following.

The Examiner concedes that the Niwa patent does not teach (1) determining, using the accepted at least one keyword (amended to read one or more keywords), whether or not a candidate search result is similar to a search result already in the set of final search results, and

(2) if it is determined that the candidate search result is similar to a search result already in the set of final search results, then not adding the candidate search result to the set of final search results, and concedes that the Niwa patent does not teach (1) determining, using the accepted at least one keyword (amended to read one or more keywords), whether or not a candidate search result is similar to a search result already in the set of final search results, and (2) adding the search results to the set of final search results only if it is determined that the candidate search result is not similar to any search results already in the set of final search result. (See Paper No. 20070614, pages 6 and 7.)

In an attempt to compensate for this admitted deficiency, the Examiner contends first that the Thomson patent provides the missing teachings, and second that one skilled in the art would have been motivated to combine the Niwa and Thomson patents to meet the claimed invention. (See Paper No. 20070614, pages 6 and 7.) The applicants respectfully disagree.

First, the Examiner contends that the Thomson patent teaches a method including determining, using accepted keyword information (amended to read one or more keywords), whether or not a candidate search result is similar to a search result already in a set of final search results, and if it is determined that the candidate search result is similar to a search result already in a set of final search results, then not adding the candidate search result to a set of final search results (and otherwise adding the candidate search result to the set of final search results). (Paper No. 20070614, page 6.) The applicants continue to disagree

because the Thomson patent neither teaches, nor suggests, a method including determining, ***using a keyword(s) (which was (were) included in the query that was used to generate the search results)***, a set of final search results. More specifically, although the Thomson patent can remove duplicate documents, either before a search (See, e.g., column 10, lines 8-11.), or after a search (See, e.g., column 10, lines 33-37.), such duplicate documents are detected either ***by matching information associated with the documents, such as title, authors and date of publication, or by redundant abstracts***. (See, e.g., column 10, lines 12-16 and 35-37.) Thus, the Thomson patent neither teaches, nor suggests, ***using a keyword(s) (which was (were) included in the query that was used to generate the search results)*** to determine whether or not a candidate search result is similar to search result already in a set of final search results.

In the "Response to Arguments" section of Paper No. 20070614, the Examiner contends that detecting duplicate documents either by matching information associated with the documents, such as title, authors and date of publication, or by redundant abstracts as the applicants note, somehow disproves the applicants' position. The applicants cannot see how detecting duplicate documents either by matching information associated with the documents, such as title, authors and date of publication, or by redundant abstracts somehow teaches ***using a keyword(s) (which was (were) included in the query that was used to generate the search results)*** to determine whether or not a candidate search result is similar to search result already in a set of final search results, and respectfully request that the Examiner

explain his position if he maintains this ground of rejection.

The Examiner also contends that in the Thomson patent, abstracts of a single title may be stored as unique text segments of a single document, citing column 10, lines 12-14. The applicants cannot see how this somehow teaches ***using a keyword(s) (which was (were) included in the query that was used to generate the search results)*** to determine whether or not a candidate search result is similar to search result already in a set of final search results, and respectfully request that the Examiner explain his position if he maintains this ground of rejection. Accordingly, claims 47, 48, 50 and 52 are not rendered obvious by the Niwa and Thomson patents for at least this reason.

Further, one skilled in the art would not have been motivated to combine the Niwa and Thomson patents as proposed by the Examiner. Specifically, in the Niwa patent, the search results are processed to generate "topic words", which are then processed for display on a graph or lists. The Examiner contends that the claimed act of (or means for) generating a set of final search results from accepted search results (amended to read search results received) using segments of the search results is somehow taught by the "topic words" extracted from the documents returned as search results. If the teaching of the Thomson patent were applied to the Niwa patent, it would presumably be applied to removing duplicate search result documents, ***before*** extraction of the "topic words." Indeed, the Examiner notes that the Thomson patent "describes a method which 'at the time of loading duplicate documents from the multiple sources

preferably are identified and removed so that the results from a search query will not include redundant or duplicate document[s]… .'" Thus, if the Thomson patent was used to remove duplicate document search results in the Niwa patent before extraction of the "topic words", such a combination would be different from the claimed invention, in which segments (alleged to read on "topic words" by the Examiner) are used to generate a final set of search results. Accordingly, claims 47, 48, 50 and 52 are not rendered obvious by the Niwa and Thomson patents for at least this additional reason.

Claims 62 and 63 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the Niwa patent. The applicants respectfully request that the Examiner reconsider and withdraw this rejection in view of the following.

The Examiner concedes that the Niwa patent does not teach a final results generator that operates automatically, without the need for user intervention. To compensate for this deficiency, the Examiner states that the Niwa patent describes a method for automatically extracting related information from retrieval results and providing the information to a user, and concludes, without any substantiation, that one skilled in the art would have been motivated to automate the generation of final results without the need for user intervention. (See Paper No. 20070614, page 7.) The Examiner argues that broadly providing automatic or mechanical means to replace a manual activation ***which accomplishes the same result*** is not sufficient to distinguish over the prior art. (See Paper No. 20070614.) As stated during the

telephone interview, the applicants respectfully disagree with the Examiner's conclusion as to obviousness.

As stated during the telephone interview, the main point of the Niwa patent is to provide "a document retrieval-assisting method ***having a user interface to attain an interactive guidance*** function for document retrieval. [Emphasis added.]" (Column 1, lines 8-10) The Niwa patent states:

> move buttons can be used as copying buttons to copy the topic words on display of topic words. In other words, the use of the button, namely the use for moving or the use for copying, is determined, depending on where a subject word is located.

(Column 5, lines 13-17) In this regard, the Niwa patent provides a specific example, stating:

> FIG. 8 is an example of topic word display regarding "electronic publishing", and herein, a user is virtually interested in one of displayed words, for example "desk top publishing". In this case, ***pointing the position of the word on display by means of mouse 12 and then pointing the move button 22222 for positive keywords, "desk top publishing"*** is stored in the area for storing positive keywords 5112, which is then displayed on the area of positive keywords 2122 of the ***user-interface window*** for information retrieval 21 and the area for positive keywords 2222 of the window for displaying topic words 22. Subsequently, ***pushing the button for search 216 of the user-interface window for displaying topic words 21 or search button 2211 of the window for***

> ***displaying topic words 22,*** search is run while adding "desk top publishing" to the positive keywords, to narrow the search. [Emphasis added.]

(Column 16, lines 22-37)

As can be appreciated from the foregoing, the main purpose of the Niwa patent is to help users refine their search, and it employs an interactive user interface to this end. ***Modifying the Niwa patent to automate the generation of final results without the need for user intervention, would destroy its purpose of allowing a user to express their desired refined search result.*** Thus, one skilled in the art would clearly not have been motivated to modify the Niwa patent as proposed by the Examiner. Consequently, claims 62 and 63 are not rendered obvious by the Niwa patent for at least this reason.

During the telephone interview, the Examiner continued to argue that the case law broadly providing automatic or mechanical means to replace a manual activation ***which accomplishes the same result*** is not sufficient to distinguish over the prior art. However, the applicants have demonstrated that automating the process ***cannot accomplish the same result*** since the portions of the Niwa patent applied by the Examiner ***depend on receiving an input from a user allowing the user to express their desired refined search result.*** During the telephone interview, the applicants requested that the Examiner cite the specific case(s) upon which he relies, and further requested that he reconsider whether the case(s) is applicable to the particular facts of the modification proposed by the Examiner.

Claims 66, 67, 70 and 71 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the Niwa patent as applied to claims 46 and 51 above, in view of U.S. Patent No. 5,940,842 ("the Sakuta patent"). The applicants respectfully request that the Examiner reconsider and withdraw this rejection in view of the following.

These dependent claims further recite that the segments are windows defined by a predetermined number of sentences or paragraphs. The Examiner contends that the Niwa patent discloses that "segments are windows defined by a predetermined number of words," (Paper No. 20070614, page 5) citing column 12, lines 28-67 of the Niwa patent. The Examiner notes that the Niwa patent can display "topic words" in a graph form of in lists. (See Paper No. 20070614, page 8.) The Examiner further contends that the Sakuta patent expands the display range to make it easy for a searcher to determine whether a located character string is a character string which the searcher really needs, citing column 1, line 65 through column 2, line 6. The Examiner then concludes that it would have been obvious to combine these purported teachings to make it easier for a searcher to determine whether a located character string is a character string which the search really needs.

Frankly, the applicant is confused as to how this combination somehow teaches or suggests that segments, which are used to generate a set of final search results from received search results, are windows ***defined by a predetermined number of sentences or paragraphs*** as claimed. Furthermore, the cited portion of the Sakuta

patent concerns a "display range changing device for changing a display range ***for displaying text containing a hit character string*** located during the search, ***according to structure units analyzed with respect to the document***. [Emphasis added.]" The purpose of this is:

> to provide a character string retrieval system which is able ***to expand a display range including the located character string both forward and backward in interactive mode in accordance with searcher's instructions***, particularly to expand the display range according to structure units in the case of a structured document, ***thereby making it easy for the searcher to determine whether the located character string is a character string which the searcher really needs***. [Emphasis added.]

(Column 1, line 65 through column 2, line 6) This is apparently to allow the searcher to consider "the context of the character string." (Column 1, lines 55 and 56)

As can be appreciated from the foregoing, the Sakuta patent concerns providing context of a retrieved character string by expanding what is displayed to a user. One skilled in the art would not have been motivated to similarly expand "topic words" in the Niwa patent since these "topic words" were extracted from numerous different document search results, and presumably have numerous different contexts.

Thus, claims 66, 67, 70 and 71 are not rendered obvious by the Niwa and Sakuta patents for at least this reason.

Further, since the purported teaching of the Sakuta patent does not compensate for the deficiencies of the Niwa patent with respect to claims 46 and 51 (discussed above), claims 66, 67, 70 and 71 are not rendered obvious by the Niwa and Sakuta patents, regardless of the scope of the purported teaching of the Sakuta patent and regardless of the presence of absence of a motivation to combine.

Amendments to the claims

Some of the claims were amended to (1) move certain recitations from the preamble to the body of the claim, (2) replace "accepting" with "receiving", and/or (3) make the claim more concise and/or clear. No new matter has been added.

Conclusion

In view of the foregoing amendments and remarks, the applicants respectfully submit that the pending claims are in condition for allowance. Accordingly, the applicants request that the Examiner pass this application to issue.

Any arguments made in this amendment pertain ***only*** to the specific aspects of the invention ***claimed***. Any claim amendments or cancellations, and any arguments, are made ***without prejudice to, or disclaimer of***, the applicants' right to seek patent protection of any unclaimed (e.g., narrower, broader, different) subject matter, such as by way of a continuation or divisional patent application for example.

Respectfully submitted,

December 27, 2007

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CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this paper (and any accompanying paper(s)) is being facsimile transmitted to the United States Patent Office on the date shown below.

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December 27, 2007
Date